

New Residential Development and School Enrollment: Just the Facts

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Planning boards are more interested than ever before in the property tax impact of new development, especially the impact of new housing on local school costs and enrollment. The level of interest far exceeds anything I've seen in my nearly 30 years as a New Hampshire-based economic consultant. Don't get me wrong, I appreciate the assignments, but it can be a daunting task to stand before a room of project opponents convinced that each new housing unit spells the doom of their community. Alternatively, it's difficult to explain to my developer clients why their project won't pay its way.

Plenty to Be Concerned About

The planning boards' concern is legitimate. According to US Census figures, enrollment in New Hampshire's public schools increased by 39,000 students between 1990 and 2000. This represents a 24 percent increase, well in excess of the 11 percent increase in overall population. Moreover, schools typically account for two-thirds of local spending, and many schools in the state are operating close to, if not over, capacity. For many communities the only thing worse than squeezing more students into the already crowded system, is the cost of building more capacity. At \$20,000 or more per student, the cost of a typical new elementary school can quickly hit \$10 million. As for middle and high schools...well, you don't want to go there.

So, what's a planning board to do? Perceiving that rising education costs and overcrowded schools arise primarily from new housing development, many local planning boards have adopted a "go slow" or "no go at all" residential development strategy. Interim Growth Ordinances that impose a temporary moratorium on new housing are becoming common. The subdivision approval process that used to take months, now often extends to a year or more. In one community I worked in recently, an application for a 12 lot subdivision drew 200 protesting residents to the planning board hearing—approaching attendance at the Annual Town Meeting.

Planning boards are feeling the heat and are responding to community pressure with residential growth restrictions. Planning boards are asking developers to present fiscal impact, traffic impact, historic preservation, environmental impact and a variety of other studies. From the perspective of my municipal clients, these studies and the inevitable follow-up peer review and additional questions are justified. From the perspective of my developer clients, the studies are part of a broader effort to avoid the perceived negative impact and local cost new residential development imposes. What's more, there is a snowball effect at play. As more and more communities adopt various growth control measures, development pressure spills over into communities without those controls. Eventually, they, too, install controls.



The Frosting Without the Cake?

More and more of my municipal clients seem to be pursuing a strategy of encouraging non residential development and discouraging all but age-restricted residential development. In effect, they want the frosting (non-residential tax base and jobs) without the cake (new worker housing). This won't work if we don't have an affordable place for workers to live. Furthermore, Economics 101 holds that artificially constraining the supply of housing will result in higher prices—at a time that affordable housing is already an economic development issue in many New Hampshire market settings.

In a nutshell, my planning board clients, even those enlightened enough to recognize the need for affordable housing, are worried that developers will bankrupt their town. Meanwhile, my developer

clients are worried that planning board restrictions and requirements driven by school concerns, will bankrupt their firm. Both sense there is a lot on the line. The concerns of each party to this issue are sincere and legitimate.

What is frustrating to me is that with so much at stake, there is surprisingly little analysis of hard data to enlighten the debate. There are plenty of studies that “document” that new housing does not pay its way. The problem is that most of them are sponsored by agencies with a clear agenda, often open space preservation. There are also studies that show housing’s economic benefits. Most of those are sponsored by groups with a pro-development agenda—housing advocates and developer groups. Both are suspect because of the agenda of their sponsoring group. Also, there is a growing body of impact studies prepared for local planning board consideration, but a sense of the big picture is missing. I hope to fill part of that void in this article.

With this in mind I address these comments to both planning boards and the development community in the hopes of clarifying at least some of the issues of residential development impact on school enrollment as it is playing out in New Hampshire.

The Conventional Wisdom: Housing Almost Never Pays Its Way

Whenever I stand before a planning board to report the results of a fiscal impact analysis, I know my toughest job will be to dislodge the conventional wisdom of residents and board members. That conventional wisdom holds that:

1. Each new housing unit will generate *at least* two new students, because most families have two kids.
2. At an annual cost of about \$10,000 for each student, each new housing unit will cost the town \$20,000, before consideration of impacts on municipal functions like recreation, fire, police, wear and tear on roads, etc.
3. A \$300,000 new home (fairly typical of new construction today) in most New Hampshire communities will generate about \$6,000 in local property taxes.
4. Therefore, new housing almost never pays its way—generating a deficit of \$14,000 under these assumptions.

This analysis, superficial as it is, is firmly ingrained in the minds of many planning board members.

But is it correct? Certainly, some aspects of it are “in the ball park”. It *does* cost about \$10,000 per student today. Most of the homes built in the state don’t come close to paying the presumed \$20,000 cost of educating two students. But the first point....that each home generates two school children overstates the reality of New Hampshire today, as I discuss in the following paragraphs.

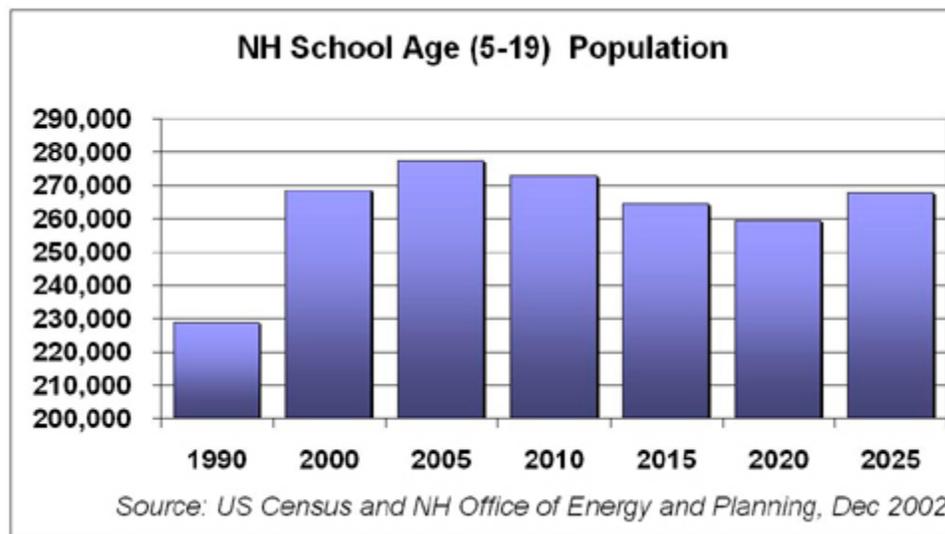
The Myth of the Two Kid Household

There is a lot of New Hampshire-specific data we can look at to get an objective sense of the school impact of new residential development. The Decennial Census is generally considered authoritative. It reveals, to the probable shock of many, that the average occupied housing unit in New Hampshire generated only 0.42 public school enrollees in 2000, well below the two enrollees per household assumed in the Conventional Wisdom cited above.

	Change 1990-2000			
	1990	2000	Number	Percent
Public Elementary, Middle, High School Students	161,550	200,400	38,850	24%
Occupied Housing Units	411,200	474,600	63,400	15%
Students per Unit	0.39	0.42		

Notice also that the ratio of public enrollees per occupied housing unit rose from .39 to .42 during the decade. This seems fairly insignificant, but it isn't. What it says is that during the decade enrollment per occupied unit increased. This is due to the "baby boom echo", wherein the children of the oversized baby boom demographic group created a bulge in school enrollment. What this means is that even in the absence of residential development, school enrollment would have risen. Some believe enrollment increases we've experienced are solely attributable to new housing construction. *In fact, two-thirds of the enrollment growth in the 1990s would have occurred even in the absence of new residential construction.*

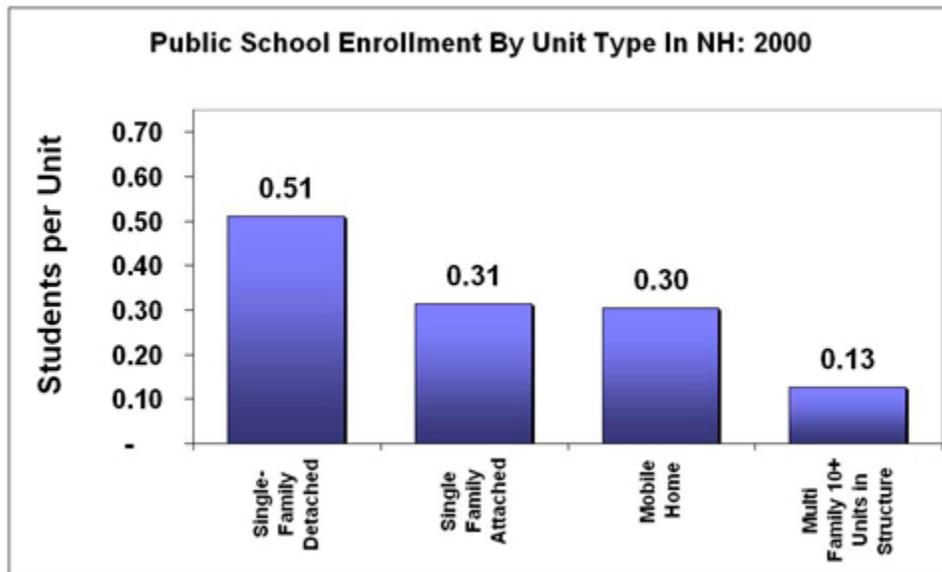
Moreover, the baby boom echo effect on school enrollment will end this decade. The states' school age (ages 5-19) grew by 40,000 in the 1990s. But, the NH Office of Energy and Planning forecasts that the State's school age population will experience a modest decline beginning in 2005, despite continued growth in the state's total population and even allowing for continued migration into the state.



Need some convincing? Pre-school population gives a strong indication of forthcoming school age population. Census figures reveal that there were 10,000 fewer pre-school aged children (ages 0-4) in New Hampshire in the year 2000, as compared to the year 1990. Thus, smaller class sizes will work their way through NH schools during the next decade, resulting in lower demographic-based enrollments. This happened in the 1970s and early 1980s, during which school boards had to wrestle with closing and consolidating schools. That's less expensive than building new schools, but not necessarily less disruptive.

Of course these statewide figures include all types of housing units—from large single family homes to efficiency apartments. Could it still be true that single family homes generate two or more students per unit?

The evidence is that this isn't the case. The Census bureau makes available detailed information from a 1 percent sample of households. Analyzing that data by unit type shows that the state's single family units have an average of .51 public school enrollees per unit, while multi family units (10 or more units per structure) generate an average of .13 students per occupied unit.



Finally, one could argue that while single family units generate .51 students per occupied unit, *new* single family units have a special appeal to families with school age children. My firm has matched the address of new single family homes built with school enrollment in settings such as Bedford, Nashua and Concord, as well as Franklin, Massachusetts and Scarborough, Maine (the fastest growing communities in their respective states). Those data shows that the typical new single family home generates between .65 and .85 students per unit. So, it is true that new single family homes generate higher enrollment than existing units, but the ratio does not approach the two students per unit assumed in the Conventional Wisdom analysis outlined above.

Leave It To Beaver/Brady Bunch

How can this be? When we think of housing, we somehow assume that every unit is occupied by your standard American household of dad, mom and two kids. I call this the "Leave it to Beaver" assumption. In the eyes of some planning boards it's even worse. They see each new unit occupied by "The Brady Bunch".

In fact, the character of our households (a household is one or more people occupying a housing unit) is much more diverse than that--more so now than ever. Here are some interesting Census observations (some of these categories overlap, so you shouldn't try to add them together):

- Only 26% of the state's occupied housing units are occupied by a married couple with children under age 18 (including children not yet enrolled in school).
- 33% of the state's occupied units consist of a household head aged 55 or over—unlikely to have school age children.
- 24 % of the state's occupied units have only one person living in them.
- 31 % of the state's occupied units are occupied by non-family households, meaning no relatives, children or otherwise, occupy the unit.

So, it has been my experience that the Conventional Wisdom substantially overstates the enrollment new housing is likely to generate.

A Word About "Cost"

The concept of "cost per student" seems clear enough and, as I noted, it generally is about \$10,000 per student annually in New Hampshire today. However, this too is a simplification. *In closely examining school district budgets in many communities in the state, you will find that a third or more of these costs are paid by state and federal grant sources, which will rise as enrollment grows.* State sources include Adequate Education Grants and School Construction Aid. The latter pays 30-40 percent of annual principal payments on school construction bonds while the former, a need based program, can offset as much as half of local costs. It is preferable to examine the local property tax appropriation per student to get an accurate sense of locally funded costs. Although state and federal aid varies from community to community, in many cases property tax funded costs can be significantly lower than the total cost per student.

The Conventional Wisdom Revisited

In view of the points set forth above, the Conventional Wisdom calculations need to be tweaked. Allowing for revised school generation and local cost figures substantially changes the results of the Conventional Wisdom approach. In fact, adjusting these two figures to move them more in line with my firm's experience results in that new single family home paying its way:

Comparison of Conventional and "Illuminated" Wisdom

	Conventional Wisdom	Conventional Wisdom Reconsidered
Revenue Estimate		
Assessed Value	\$300,000	\$300,000
Times: Tax Rate per \$000	<u>\$20.00</u>	<u>\$20.00</u>
Equals: Tax Revenue per Unit	\$6,000	\$6000
Cost Estimates		
Cost per Student	\$10,000	\$10,000
Less: Non-Local Share	<u>\$ -</u>	<u>\$(3,000)</u>
Equals: Local Cost per Student	\$10,000	\$7,000
Times: Students per Unit	<u>2.00</u>	<u>0.75</u>
Equals: Local Education Cost per Unit	\$20,000	\$5,250
Revenues Minus Education Costs	<u>\$(14,000)</u>	<u>\$750</u>

This should not be interpreted to mean that single family homes always pay their way in New Hampshire. The impact of new residential development will vary significantly from community to community and among different developments within the same community. *But* my hope is that the reader will see that the impact of new residential construction is not always as bad as many believe. Then, I may have an easier time defending my research the next time I stand before *your* planning board!

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